

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: **Arnold G. Slezak**
Assignee: **Seagate Technology LLC**
Application No.: **09/981,556**
Filed: **October 17, 2001**
For: **METHOD TO REDUCE SERVO PATTERN RUNOUT ON A PREWRITTEN DISC**

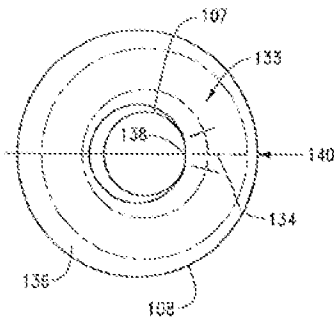
Group Art Unit: **3729**
Examiner: **Anthony D. Tugbang**

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Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

APPLICANT'S REMARKS FOR PRE-BRIEF REQUEST

THE FACT THAT THE OFFICE BELIEVES THE FEATURED *ALIGNMENT AXIS* CAN REASONABLY BE READ ON AXES DIRECTED OUT OF THE DISC PLANE IS AN UNRESOLVED FACTUAL ISSUE MAKING THE SECTION 112 INDEFINITENESS REJECTION NOT READY FOR APPEAL

The claims stand rejected under Section 112 because the Office believes the claim term *alignment axis* is indefinite. Claim 1 recites *a plurality of prewritten discs, each prewritten disc having servo tracks characterized by a concentricity offset in a direction of an alignment axis....* Applicant has shown that FIG. 2 and the descriptions thereof clearly disclose a prewritten disc 108 having a servo track pattern (depicted by broken circles¹) that is characterized by a concentricity offset in a direction of a physical indicia manifested by an alignment mark 134.



¹ See specification pg. 6:29-30.

Applicant has also shown that the specification explicitly discloses other embodiments that do not employ the alignment mark, yet likewise control the concentricity offset in like manner.² The skilled artisan having read the specification understands that the *alignment axis* in all embodiments is defined by the radial axis along which the biasing force is applied to the disc during servo write. The *alignment axis* necessarily exists in all embodiments, the alignment mark is merely coexistent with the *alignment axis* to give a visual indication of it.

The Office believes that it would be impossible for the skilled artisan to render an understanding of what the featured *alignment axis* encompasses. The Office's rationale is that the *alignment axis* could purportedly include an indeterminable number of axes into and out of the sheet of paper on which FIG. 2 is depicted. However, Applicant has shown that the only way to reach that conclusion is by in vain attempting to ascribe some reasonable meaning to *alignment axis* in a rigid isolation from the contextual meaning of the term formed by the language as a whole of which the disputed term is a part. Particularly, the *alignment axis* is explicitly recited as being the direction in which the servo tracks are concentrically offset. Applicant has shown that the skilled artisan readily knows that it is unreasonable (even nonsensical) to argue that the servo tracks could be concentrically offset in any plane other than the plane of the disc 108. Contrary to the Office's rationale, the skilled artisan knows that the servo tracks cannot be concentrically offset in any direction into or out of the sheet of paper on which FIG. 2 is depicted.

This issue remains unresolved only because the Office has chosen not to respond to Applicant's showing. Where Applicant traverses any rationale, the Office should, if repeating the rationale, take note of Applicant's argument and answer the substance of it.³ By answering the substance of Applicant's argument, the Office provides a complete application file history which enhances the clarity of the prosecution history record. However, in this case the Office has not answered the substance of Applicant's arguments.

² See specification pg. 7:12-15: "In yet another preferred embodiment, no alignment mark is placed on the prewritten disc at all."

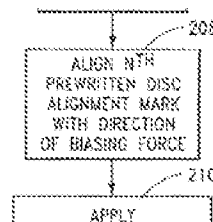
³ MPEP 707.07(f).

Applicant identified this as an unresolved factual issue making the case not in condition for appeal.⁴

THE FACT THAT THE OFFICE IGNORES EXPLICIT DISCLOSURE IN FINDING NO SUPPORT FOR THE FEATURED *ALIGNMENT AXIS SYMMETRICALLY DISPOSED AROUND THE MOTOR HUB* IS AN UNRESOLVED FACTUAL ISSUE MAKING THE SECTION 112 WRITTEN DESCRIPTION REJECTION NOT READY FOR APPEAL

The legal criteria for satisfying the written description requirement is whether Applicant has disclosed the technologic knowledge upon which the rejected claim is based, and demonstrated a possession of the claimed invention at the time of filing.⁵ The written description requirement does not require the applicant to describe the claimed invention in exactly the same terms chosen for the claim language; rather, the description must clearly allow persons of ordinary skill in the art to recognize that he invented what is claimed.⁶

FIG. 2 above depicts the prewritten disc 108 being biased against the motor hub 107 by a biasing force 140. The prewritten disc has been positionally rotated to radially align the alignment mark 134 (alignment axis) with the direction of the biasing force 140. This process is described in the alignment step in block 208 of the method depicted in FIG. 3:



The direction of the biasing force (such as biasing force 140) is explicitly disclosed in the specification as being that which advantageously balances the plurality of discs that form a disc stack.⁷ The skilled artisan having read that disclosure readily understands that placing the alignment axes “symmetrically around the motor hub,” as featured in claim 1, is a meaning that plainly includes placing them oppositely (180 degrees apart) in a stack of even number of discs, and includes placing them at even angular intervals (such as 120 degrees apart for three discs) in a stack of an odd number of discs. Therefore, the skilled artisan finds

⁴ Applicant’s Response of 1/15/2011 pg. 11.

⁵ *Ariad Pharmaceuticals v. Eli Lilly and Co.*, 2008-1248 (Fed. Cir. 2010) *en banc*.

⁶ *Union Oil Co. of California v. Atlantic Richfield Co.*, 208 F.3d 989 (Fed. Cir. 2000), *cert. denied*.

⁷ Specification pg. 7:20-30 .

clear support for the *alignment axes...are angularly disposed symmetrically around the motor hub* feature of claim 1, and that support is from information which is found in the originally filed specification.

Contrary to the Office's stated position, there simply is no written description requirement that the criteria can only be satisfied in terms of the explicitly recited terms in the claim, such that only some explicit usage of the terms "angularly disposed" and "symmetrically" could allegedly provide the requisite written description support.⁸ As above, the Office has chosen not to answer the substance of Applicant's argument on this issue, and Applicant identified it as an unresolved factual issue that must be addressed before this case is ready for appeal.⁹

THE FACT THAT KUROBA'S DISCLOSURE SPECIFICALLY EXCLUDES THE FEATURED *CONCENTRICITY OFFSET...IN SAME ANGULAR DIRECTION FOR ALL OF THE PLURALITY OF PREWRITTEN DISCS* IS AN UNRESOLVED FACTUAL ISSUE MAKING THE SECTION 102 REJECTION NOT READY FOR APPEAL

Claim 1 features in pertinent part *placing a plurality of prewritten discs, each disc having servo tracks characterized by a concentricity offset in a direction of an alignment axis that is in the same angular direction for all of the plurality of prewritten discs...*

The skilled artisan having read the specification understands that in a three-disc stack, for example, all of the discs have servo tracks written to them concentrically offset in the same direction, such as in the zero degree direction of the alignment mark depicted in FIG. 2. That advantageously permits writing the servo tracks to all three discs in one setup, and even writing the servo tracks to all three discs simultaneously. After the discs are prewritten, they are then placed around the motor hub so that the alignment axes are disposed symmetrically. In this example, the alignment axes would be 120 degrees apart. Therefore, claim 1 features a plurality of discs having servo tracks that are written concentrically offset in relation to an alignment axis that is in the same direction for all of the discs, but yet each disc has a different contact position against the motor hub in aligning the prewritten disc with the desired biasing force.

⁸ Office Action pg. 3: "The specification, as originally filed, does not even use the terms of "angularly disposed" or "symmetrically."

⁹ Applicant's Response of 1/15/2011 pg. 13.

Applicant has also shown that Kuroba discloses a different solution whereby each of the three discs in this example would necessarily be written individually with respect to its contact position against the motor hub:

If a plurality of disk media 20 are stacked, a balance control can be attained by the following manner...However, in a case of the data surface servo system, the servo track writing (STW) must be performed individually for the groups of disks in which the contact position is changed for the respective groups.¹⁰

Applicant has also shown that the skilled artisan readily recognizes that the only reason that the discs in Kuroba must be written in groups according to their respective contact positions against the motor hub is that the servo pattern offsets are written in relation to alignment axes that are in different angular directions. If they were written in relation to alignment axes in the same angular direction, as in the claimed embodiments, then there would be no necessity to write them individually as Kuroba mandates (“must be performed individually”).

The Office has not substantiated *prima facie* anticipation by not showing that Kuroba identically discloses at least the *a plurality of prewritten discs, each disc having servo tracks characterized by a concentricity offset in a direction of an alignment axis that is in the same angular direction for all of the plurality of prewritten discs* feature of claim 1. In fact, the skilled artisan recognizes that the featured *concentricity offset...in the same direction* language of the independent claims **specifically excludes** what Kuroba discloses. As above, the Office has chosen not to answer the substance of Applicant’s argument on this issue, and Applicant identified it as an unresolved factual issue that must be addressed before this case is ready for appeal.¹¹

Conclusion

Applicant respectfully requests that the Panel withdraw the final rejection so that these unresolved factual issues can properly be addressed.

Respectfully submitted,

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¹⁰ Kuroba col. 8:38-41 (emphasis added).

¹¹ Applicant’s Response of 1/15/2011 pg. 16.

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